Red Light Confirmation Lights

A simple tool for safer intersections.

Prepared by Robin Butler, Principal Coordinator
Seminole County Traffic Engineering

Impact of Red Light Running Nationally

- 106,000 red light running crashes in 2000
- 89,000 injuries
- 1036 fatalities

Figures from Federal Highway Administration

The Impact of Red Light Running in Florida

- In 2000, 114 motorists were killed and another 13,926 were injured in Florida due to red light running.

- This resulted in an economic loss of approximately $346 million.

Figures reported from the *Traffic Crash Facts Reports*, Florida Department of Highway Safety and Motor Vehicles

The Impact of Red Light Running in Seminole County

- $862,212 Estimated Vehicle Damage
- 296 Crashes
- 117 Injuries

Figures represent crashes resulting from "Disregard a Traffic Control Device" for the 12 months of April 1, 2002 thru March 31, 2003 obtained from the SCTE Crash Data Base

The impact of Red Light Running at the intersection of Lake Mary Blvd. @ Lake Emma Road

- $163,000 estimated vehicle damages
- 60 Total Crashes
- 5 Disregard a Traffic Control Device
- 8 Injuries

Figures represent data from SCTE data base for the 2002 calendar year

Current Judicial Requirements

- Officer must see the color of the light facing the violator.
- Officer must be able to see the stop bar.
- The officer must be able to testify to the violator's vehicle and its distance from the stop bar at the time of the red signal.

Operation Methodology

- Spotter officer sets up to monitor one specific direction of an intersection.
- Ticketing officer(s) set up “downstream” of the intersection.
- Spotter calls out violators to ticketing officer.
- Violator is motorist who passes stop bar after the signal indication has gone to a red signal phase.
- Spotter is limited by the number of ticketing officers.

How Did We Get Here From There?

- Initiated by Seminole County Community Traffic Safety Team request.
- Members of the Seminole County CTST visited operating site in Clearwater, Florida to evaluate their effectiveness.
- Clearwater officials reported a reduction of 50.4% in RLR incidents.
- Chief Judge Eriksson provided judicial support on 12/18/02.
- Local agencies selected Pelco SM-0284.
- Lake Mary PD and Seminole County SO provided funding for pilot installation.
- Seminole County TE installed equipment for pilot installation.

SURVEY RESULTS

DATE	TIME	DIRECTION	# OF VEHICLES	# OF RLR's	%AGE
11/15/02	4:00 pm – 5:30 pm	WB LMB	100	12	12%
11/22/02	4:00 pm - 5:30 pm	SB Primera	100	24	24%
12/17/02	10:30 am – 11:30 am	NB Lake Emma Rd.	100	23	23%

Confirmation Lights

- Inexpensive, non intrusive technology ($100 per light fixture – approx. 8 fixtures per intersection)-no pictures.

- All red light violators will face the same penalty.

Confirmation Lights

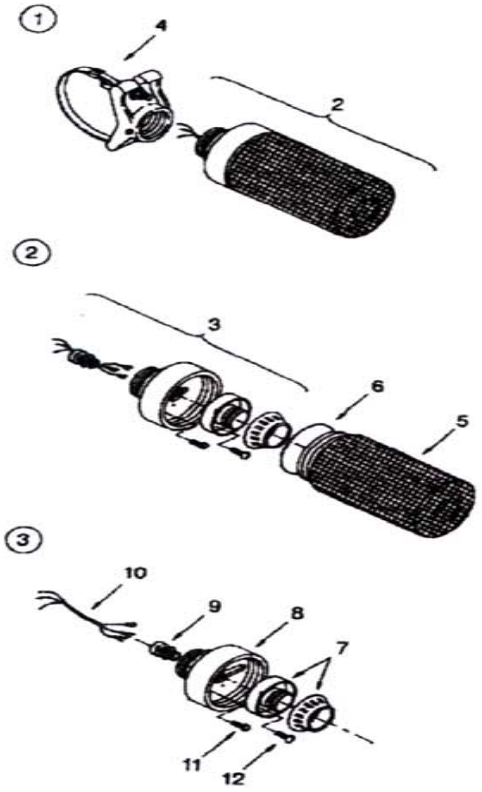
- Confirmation light fixture is wired directly into the circuit of the red signal indicator.
- Power to the red signal is the same power to the white confirmation light.
- Confirmation light is lit simultaneously as red signal indication to which it is attached.
- Officers can determine the start of the red signal indication from any direction.

Installation Process

- Joint assessment team of local engineers and law enforcement officials evaluated this requested location.
- Location had documentation of red light violations.
- Location facilitated safe access to the violator and a clear view of the stop bar.

pelco
PELCO PRODUCTS, INC.

TRAFFIC SIGNAL CONFIRMATION LIGHT

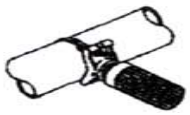


ITEM	DESCRIPTION	PART NO.
①	TRAFFIC SIGNAL CONFIRMATION LIGHT ASSY., W/ Astro-Mini-Brac & Blue Globe	SM-0286-L
	TRAFFIC SIGNAL CONFIRMATION LIGHT ASSY., W/ Astro-Mini-Brac & Clear Globe	SM-0287-L
②	TRAFFIC SIGNAL CONFIRMATION LIGHT ASSY., W/ Blue Globe	SM-0284
	TRAFFIC SIGNAL CONFIRMATION LIGHT ASSY., W/ Clear Globe	SM-0285
③	CONFIRMATION LIGHT SUB-ASSY.	SM-0283
4	ASTRO-MINI-BRAC, 1½"-11½ NPS W/ 42" BAND	AB-0121-42
5	BLUE GLOBE, Prismatic Polycarbonate, 3½" x 5-3/4"	SM-0280
	CLEAR GLOBE, Prismatic Polycarbonate, 3½" x 5-3/4"	SM-0281
6	O-RING,	SE-0215
7	2-PIECE RECEPTACLE, Porcelain Concealed Terminals	SM-0180
8	ADAPTER, Confirmation Light	SE-0573
9	CGB, .55" to .65" Wire	SE-4028
10	WIRING, Traffic Signal Confirmation Light, 14 AWG x 15"	SM-0282-15
11	SCREW, Phil. Pan Hd., #8-32 x ½", Stainless	FS-3995-SS
12	SCREW, Hex. Washer Hd., #8-32 x 3/8", Self-Tap	FS-3107-SS

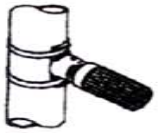
NOTES:

1. RECOMMENDED 67 OR 69 WATT 8000 HR TRAFFIC SIGNAL LAMP (NOT TO EXCEED 75 WATTS).
2. ALL GLOBES ARE MOLDED FROM UV STABILIZED IMPACT RESISTANT POLYCARBONATE.
3. OTHER GLOBE COLORS ARE AVAILABLE UPON REQUEST.
4. SPECIFY BAND LENGTH REQUIRED ON MINI-BRAC. STANDARD LENGTH OF 42" WILL FIT 4"-12" DIA. POLE.
5. SEE SECTION 3 BULLETIN #119 FOR OTHER HUB TYPES.

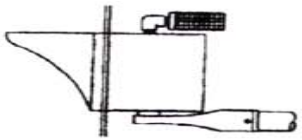
TYPICAL APPLICATIONS:



MAST ARM MOUNTING
Astro-Mini-Brac



SIDE-OF-POLE MOUNTING
Banded Narrow Hub



PLUMBIZER MOUNT

320 S.W. 18th St. • Edmond, Oklahoma 73013 • (405) 340-3434 • FAX: (405) 340-3435 • E-mail: pelco@pelcoinc.com

Lake Mary Blvd. @ Lake Emma Road

Enforcement Activity 5/13/03

- 8:00 AM – 12:00 PM
- 14 Participants representing 5 agencies
- 45 Traffic Citations
- 38 Red Light Running Citations

This operation was the inauguration of the red light confirmation light signal installation. The event received widespread media coverage.

Enforcement Activity 10/7/03

- 7:30 AM – 2:00 PM
- 16 Participants representing 5 agencies
- 94 traffic citations issued
- 69 Red Light Running Citations

The FDOT will purchase Confirmation Lights for 300 intersections over the next five years and distribute them to local traffic engineers for installation at intersections identified by local law enforcement. There are three conditions that must be met to receive this equipment:

1) commitment by law enforcement to place emphasis on enforcement at these locations
2) commitment from traffic court judges to uphold this technology as they would observation of the red light itself
3) installation costs will be the responsibility of the maintaining agency.

QUESTIONS?

Please Contact Robin Butler

Seminole County Traffic Engineering

(407) 665-5641